

found unpatentable where the alleged difference in form or purity of those substances was either disclosed or inherent in, or rendered obvious by, the prior art of record. . . . Merely stating that a compound or composition is obvious, without adequate factual support, is not sufficient." 148 U.S.P.Q. at 271.

#### ***Unexpected Results***

As explained in applicants' Amendment filed March 16, 2006, even if it were to be considered that the claimed method, including the recited limitation of the billet-producing procedure to the novel feature of a Cu content of <0.015 wt % in every billet of a population produced in the recited way from virgin metal and recycled scrap, is *prima facie* obvious from the applied references, nevertheless the provision of that feature achieves an unexpected beneficial result overcoming any such *prima facie* obviousness. This result is the achievement of desirably high and uniform "matteness" of surfaces of anodized extrusions made from the billets so produced.

The second Parson Declaration under 37 C.F.R. §1.132, also previously submitted, explains that approximately 20% of aluminum extrusions are given an anodizing treatment (with successive etching and anodizing steps) to produce a durable decorative coating (second Parson Declaration, p. 2).

"For high quality applications . . . a uniform matte finish is considered more pleasing to the eye and is desirable for both clear and colored finishes. The underlying metal surface produced in the etch step is primarily responsible for this aspect of the product."

(*Id.*, p. 3).

Heretofore, however, in the case of extrusion billets cast from melts containing recycled scrap and virgin metal, "Extrusions made from such metal showed an unexplained variation in matteness from batch to batch after etching and anodising" (first Parson Declaration, pp. 2-3).

The claimed invention overcomes this problem. As the first Parson Declaration further sets forth (p. 4), "The present invention arose from the realisation that such undesirable variation in matteness could be avoided by controlling the Cu level below 0.015%, preferably below 0.010%, in **all** of the metal from cast to cast with the low Cu level." The Declaration describes comparative tests wherein

"The inventive alloy with the controlled copper content was extruded alongside an alloy with a copper content greater than 0.015 wt %. The extrusions were etched and anodised in the T4 and T5 tempers and the gloss was measured before and after anodising. Figure 3 [of the first Parson Declaration] summarises the results, where in all cases the alloy with the controlled copper content gave a matter [i.e., more matte] finish both by eye and by gloss measurements" (*Id.*, pp. 4-5).

Clearly, the reliable and consistent production of extrusion billets uniformly containing less than 0.015 wt % Cu is a beneficial result, in affording reliably superior matteness of the surfaces of etched and anodized extruded products made from the billets. Equally, this is a result that would not have been expected from the applied references (JP '684, Morris et al. and GB '595), since none of these references teaches that Cu is a result-effective variable with respect to "matteness" of anodized surfaces of extrusions, or indeed intimates any relationship between Cu content and matteness of anodized surface.

The Office Action asserts that Figure 3 in the first Parson Declaration "fails to show unexpected result of criticality because the difference of gloss units due to Cu content is less than 10%." In response, applicants respectfully note that the first Parson Declaration expressly states that "in all cases the alloy with the controlled copper content gave a matter [i.e., more matte, less glossy] finish . . . by eye" as well as by gloss measurements. This is an express report of a test result "by eye"

affirming that the difference is visually perceptible. It is the visual perception of difference, where uniformity is desired, that is critical for product acceptability. The reported test result "by eye" affirms that the measured difference in gloss units is indeed significant, contrary to the speculative dismissal of that difference in the Office Action.

The Office Action further asserts that "instant 132 declaration failed to show claimed Cu content is critical and possessed unexpected result" because "It is known in the art of cited references that less impurities would produce better properties." In response, applicants submit, first, that Figure 3 of the first Parson Declaration and the accompanying discussion in the Declaration are properly probative of criticality because they compare both visual and gloss unit measurement results with extrusions made from alloys respectively containing more and less than 0.015 wt% Cu, which is the variable as to which criticality is to be shown. Second, applicants again note than none of the applied references remotely suggests that Cu content is a result-effective variable at all with respect to matteness of finish; hence it cannot be said to be known in the art that less Cu would produce a more matte finish.

#### ***Commercial Success***

Applicants' previously submitted showing of commercial success is dismissed in the Office Action with the assertion that "there is no basis or comparison for the claimed commercial success. In response, applicants are submitting herewith a Declaration of Thiagarajan Ramanan under 37 C.F.R. §1.132 (Facsimile copy) with three attached Exhibits. These Exhibits are letters from customers who have purchased extrusion billets produced by the method of the claimed invention for various periods of time. Each of the customers states that these billets have given very satisfactory performance, with consistency and matte finish far superior to other conventional 6063 type alloys

they have been using. The customers also state that they plan to continue to use the product and to expand its usage in the future.

It is submitted that these showings establish the requisite nexus between sales and the inventive features of the claimed method so as to demonstrate commercial success that is entitled to weight in determining the patentability of the invention.

For the foregoing reasons, it is believed that each of independent claims 9, 10, 13 and 14 distinguishes patentably over JP '684, Morris et al., GB '595 and any proper combination thereof, by virtue of the recitals quoted and discussed above, and that all the other claims, being dependent on one or more of these claims, are likewise allowable. Favorable action is accordingly courteously requested.

Respectfully,

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I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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